



October 16, 2014

Ms. Machele Vieux, P.E.  
Deputy Director  
General Services Agency  
County of San Luis Obispo  
1087 Santa Rosa Street  
San Luis Obispo, CA 93408

**Re: PG&E Sustainable Solutions Turnkey (SST) Program**  
**Proposal for Investment Grade Assessment (IGA)**

Machele:

First, let me thank you for your commitment to PG&E's Sustainable Solutions Turnkey Program and for the time invested by you and your entire team. We are very excited to assist the County of San Luis Obispo (CoSLO) in achieving their energy, cost reduction and sustainability goals.

Attached is our proposal for the next step in the process, the Investment Grade Assessment (IGA). Please review the information and confirm it meets your needs and expectations. Following your approval, we will prepare a Work Order containing all of the relevant Scope of Work (SOW), cost and preliminary work schedule which will be included as an addendum to the Master Services Agreement (MSA) which we have already negotiated.

If you have any questions, please do not hesitate to contact me. Our entire team looks forward to getting started on this exciting project at the earliest possible date.

Respectfully submitted,

**PACIFIC GAS & ELECTRIC COMPANY**

*Brent*

Brent Patera  
Senior Business Development Manager  
Customer Energy Solutions

C: Leslie Brown, Anthony Roner, John Garnett

## EXECUTIVE SUMMARY

The Sustainable Solutions Turnkey Program (SST) has been developed by PG&E to assist customers in achieving their energy, cost reduction and sustainability goals. By design, the program follows a thorough and disciplined process to validate both customer goals and the appropriate steps to ensure project success.

For CoSLO, the process and findings can be summarized as follows:

- 1) **Feasibility Assessment** to establish goals and confirm viability of a project
- 2) **Preliminary Energy Assessment** to identify technical solutions, savings and financial performance
- 3) **Investment Grade Assessment** to finalize the Scope of Work, schedule, funding sources and deliver a firm fixed cost proposal for implementation
- 4) **Executive and Board Approval** for the IGA and subsequent implementation
- 5) **Design/Build** implementation of County-selected measures
- 6) **Acceptance and Close-Out** including commissioning, operator training and Measurement & Verification (M&V)

PG&E, with its sub-consultant (AECOM), has completed a feasibility assessment (FA) and a preliminary energy assessment (PEA) for the County of San Luis Obispo; the final version of which is dated July 30, 2014 and has been delivered to the County under separate cover. Per email communication on 9/8/14, the IGA will include the Energy Conservation Measures (ECMs) generally referred to as “Option 1” and identified in **Table 1**. Per County direction, proposed measures 1j, 4 & 10 have been removed.

**Table 1:IGA Energy Conservation Measures**

| ECM # | ECM Description                    | Location   |
|-------|------------------------------------|--|
| 1     | Lighting Upgrades                  | Various Buildings  |
| 2     | Variable Flow CHW                  | Government Center  |
| 3     | Variable Flow HHW                  | Government Center  |
| 5     | Packaged Unit Replacement          | Juvenile Hall / Health Lab                                   |
| 6     | Chiller Replacement                | Government Center  |
| 8     | Retrocommissioning (RCx)           | Government Center / Main Jail                                |
| 9     | Pneumatic-DDC Tstats               | Library  |
| 11    | Install H&V Unit VFDs              | Main Jail  |
| 13    | High Efficiency Transformers       | Government Center / Social Services / Honor Farm / Main Jail |
| 14    | H&V Unit Replacement               | Honor Farm   |
| 15    | Walk in Cooler/Freezer Replacement | Honor Farm   |
| 19    | Kitchen Hood Controls              | Honor Farm   |
| 20    | Personal Computer EMS              | Various  |
| 21A   | EMCS Expansion*                    | Various Buildings  |

\*see Attachment A on pg. 9 of 10 for a list of facilities and costs for ECM-21A.

## SCOPE OF WORK

### **Project Development**

PG&E will provide all of the necessary preliminary project design, development and administrative resources necessary to prepare a firm-fixed cost proposal for implementation. At 35% IGA completion, the County and PG&E will convene a Project Status meeting to review the progress and findings. The topics for review and evaluation will include:

- 1) Technical findings from the detailed evaluation of subject ECMs
- 2) Improved financial visibility based on more detailed analysis
- 3) Status of County funding sources
- 4) County priorities and preliminary phasing of implementation
- 5) Confirm measures to be included in the final fixed price proposal for the first phase of implementation.

Following the Project Status meeting, PG&E will complete the IGA and present the final IGA Report and implementation proposal to the County. PG&E will also work closely with the County to prepare the submittal package for Board approval, including assistance in developing any public “messaging/communication” plan that may be desired by the County.

## Facilities

PG&E will evaluate the facilities shown in **Table 2**.

**Table 2: County of San Luis Obispo Facilities**

| Site                         | Address             |
|------------------------------|---------------------|
| Old Government Center        | 1050 Monterey St.   |
| Annex                        | 1035 Palm St.       |
| Courthouse/ Central Plant    | 976 Osos St.        |
| New Government Center        | 1055 Monterey St.   |
| Library                      | 995 Palm St.        |
| Main Jail                    | 1585 Kansas Ave.    |
| Juvenile Services            | 1065 Kansas Ave.    |
| Sheriff - Honor Farm         | 885 Oklahoma Ave.   |
| Health Agency/ Mental Health | 2180 Johnson Ave.   |
| Public Health Laboratory     | 2191 Johnson Ave.   |
| Social Services              | 3433 S. Higuera St. |

## Project Meetings & Submittals

PG&E will lead a project kickoff meeting with County personnel to review the project development plan and schedule:

- Discuss project goals, scope, process and schedule.
- Discuss county expectations, needs and preferences as well as any issues and constraints.
- Review PG&E data needs.
- Establish site work protocols and procedures including safety, security, allowable work hours, vehicle parking, and access to facility areas.

PG&E will lead bi-weekly status, planning and coordination meetings with the County via telephone conference calls, or in-person, as appropriate. PG&E will submit a list of preliminary ECMs once the initial analysis has been completed and will submit a 35% draft IGA report for review and comment. Once the County selects the final ECM's that it wants to include in the project, PG&E will finalize the scopes of work, preliminary designs, material/system selections, contractor bidding, construction pricing, and will submit the final IGA report to the County to generate a Work Order for the implementation of the associated work.

## Site Visits

PG&E will perform site visits as required to meet with site personnel, collect facility information, obtain system/equipment measurements and conduct project bid-walks with selected vendors and subcontractors.

## Development of Energy Conservation Measures

Building on the work already completed in the Feasibility Study and PEA, PG&E will further develop technically and economically feasible ECMs at the sites identified in Table 2. This effort will typically involve the following activities:

- Perform detailed on-site surveys (audits) of existing energy and water consuming systems.
- Measure key operating parameters for energy consuming systems.
- Evaluate existing site conditions to gain an understanding of buildings, systems, structures and facility operation needed for energy analyses and design of ECMs.
- Identify and consider additional ECMs and facility improvements not included in the initial feasibility assessment.
- Evaluate existing site conditions needed for detailed energy analyses and design of target ECMs.
- Prepare calculations to apply for OBF, CEC and/or other loan programs and assist county in the respective application processes
- Develop detailed solutions including preliminary designs and scopes of work required for procuring bids for project implementation.
- Prepare contractor and/or equipment bid packages and conduct formal bidding process.
- Validate expected benefits, energy and cost savings, and implementation costs.
- Finalize selection of project funding sources with the County
- Prepare and submit final IGA report and implementation proposal.

## IGA Report

The IGA report and project implementation proposal will include the following:

- **Executive Summary** - Provides an overview of the project's scope of work, financials and next steps.
- **Utility Analysis** – This analysis examines relevant utility information for each site for the past twenty-four (24) months (as available from the utility providers) to establish baseline consumption, costs and rates for electricity, water and natural gas. This effort will also include energy benchmarking of each facility to show energy use performance relative to similar facilities in industry standard databases.

- **Energy Allocation Analysis** – An energy use allocation analysis will be created for each facility to show end use energy consumption. This analysis examines end use energy consumption for significant systems and equipment at the sites and relates it to the total utility consumption for the facility.
- **Energy Conservation Measures** – Provides a detailed discussion of each ECM including existing conditions, proposed solution, scope of work for implementation, and expected benefits, savings and implementation costs. Technical and financial data to support the recommendations and conclusions for each ECM will be provided in sufficient detail to enable the county to make an independent evaluation of each ECM. For example, the energy and O&M savings analysis will include the following:
  - Base year energy use and cost.
  - Post-retrofit energy use and cost.
  - Savings estimates including analysis methodology, supporting calculations and assumptions.
  - Operation and maintenance savings methodology, calculations and key assumptions.
  - Spread sheet analysis and/or computer simulation (where appropriate). Each analysis will include a short description and statement of key input data.
- **Cost Benefit Analysis** – Provides a financial analysis of each ECM including simple payback and Savings to Investment Ratio (SIR) using Life Cycle Cost Analysis (LCCA). These analyses will include appropriate inflation rates, discount rates, county cost of funds and utility escalation rates.
- **Design Information** – Appropriate design information will be provided as necessary to supplement the written description of each ECM selected for implementation, sufficiently describe the function and features of the proposed solution, and to provide sufficient detail for developing firm design-build construction costs. Final design packages will be provided as part of the construction portion of each project phase.
- **Project Rebates and Incentives** – Provides a detailed description of available rebate and incentive programs for which the proposed projects are eligible including all related documentation necessary to successfully complete the application process. PG&E will initiate the rebate and incentive process and will provide a schedule identifying key tasks, milestones and roles and responsibilities associated with the approval process including calculations and the coordination of pre-construction (baseline) inspections.

- **Project Design and Construction Schedule** – Provides a preliminary project design and construction schedule (Microsoft Project Gantt Chart format) identifying each task including key milestones and responsible parties.
- **Turn-Key Construction Cost** – Provides a detailed and transparent firm fixed cost proposal for each recommended ECM and the overall project package. Includes a preliminary schedule of values for the implementation phase of the project.
- **Measurement and Verification Approach** – Provides a summary of the M&V approach for each recommended ECM.

## IGA DELIVERABLES

PG&E will provide the following Deliverables to the County of San Luis Obispo.

- Meeting notes for PG&E/AECOM's meetings with the county.
- Hardcopy and soft copy of the Final IGA Report and Project Implementation Proposal.
- Preliminary implementation schedule

## ASSUMPTIONS AND CLARIFICATIONS

The following assumptions and clarifications apply to the scope and costs presented in this proposal.

- PG&E assumes that certain facility data/information will be made available in a timely fashion including utility bills, facility construction drawings, equipment data, and O&M data.
- PG&E will require close coordination with County personnel in order to successfully complete the IGA. PG&E assumes that appropriate personnel will be available during the site visits and meetings, and will also be readily available by email and telephone for follow-up consultations.
- The county will provide escorts for PG&E personnel if needed while visiting the facility. The county will arrange and provide access for PG&E to all facility areas and equipment as needed to complete the work.

## SCHEDULE

PG&E is prepared to begin work immediately upon receiving a Notice to Proceed (NTP) and we expect to complete the IGA within one hundred twenty (120) days. PG&E will provide a detailed schedule as part of the project's kickoff meeting.

## COST

PG&E's price to provide the services described herein is \$160,000. PG&E will invoice the County monthly based on the following schedule of values.

| Item                        | Total % Complete<br>(Updated Monthly) | Total Value (\$) | Remaining Balance (\$) |
|-----------------------------|---------------------------------------|------------------|------------------------|
| Mobilization                | 0%                                    | 16,000           | 16,000                 |
| 35% IGA                     | 0%                                    | 40,000           | 40,000                 |
| Project Pricing Procurement | 0%                                    | 48,000           | 48,000                 |
| 100% DRAFT IGA              | 0%                                    | 32,000           | 32,000                 |
| Final IGA                   | 0%                                    | 16,000           | 16,000                 |
| Meetings / Presentations    | 0%                                    | 8,000            | 8,000                  |
|                             | 0%                                    | 160,000          | 160,000                |



## Attachment A- ECM-21A Facilities and Costs

| EMCS - New Installations |            |                              |                  | # Units | Eqpt Type          | Total Cost \$ |
|--------------------------|------------|------------------------------|------------------|---------|--------------------|---------------|
| Priority                 | ECM#       | Building                     | City             |         |                    |               |
| Priority #1              | ECM-21A.1  | Public Works                 | Paso Robles      | 3       | HVAC Systems       | \$ 34,080     |
|                          | ECM-21A.2  | Public Health                | Paso Robles      | 4       | HVAC Systems       | \$ 45,440     |
|                          | ECM-21A.3  | Ag Commissioner              | Templeton        | 3       | HVAC Split Systems | \$ 13,632     |
|                          | ECM-21A.4  | Sherrifs Offices             | Templeton        | 4       | HVAC Split Systems | \$ 18,176     |
|                          | ECM-21A.5  | Social Services              | Atascadero       | 4       | HVAC Split Systems | \$ 18,176     |
|                          | ECM-21A.6  | Social Services              | Atascadero       | 5       | HVAC Systems       | \$ 56,800     |
|                          | ECM-21A.7  | New Atascadero Library       | Atascadero       | 4       | HVAC Systems       | \$ 45,440     |
|                          | ECM-21A.8  | Drug and Alcohol Services    | Atascadero       | 4       | HVAC Systems       | \$ 45,440     |
|                          | ECM-21A.9  | Atascadero Hospital Site     | Atascadero       | 5       | HVAC Split Systems | \$ 22,720     |
|                          | ECM-21A.10 | Atascadero Hospital Site     | Atascadero       | 2       | HVAC Split Systems | \$ 9,088      |
|                          | Subtotal   |                              |                  |         |                    | \$ 308,992    |
| Priority #2              | ECM-21A.11 | Sheriff Sub Station          | Los Osos         | 1       | HVAC Systems       | \$ 11,360     |
|                          | ECM-21A.12 | Ag Commissioner              | Arroyo Grande    | 4       | HVAC Systems       | \$ 45,440     |
|                          | ECM-21A.13 | Arroyo Grande Library        | Arroyo Grande    | 6       | HVAC Systems       | \$ 68,160     |
|                          | ECM-21A.14 | Health Center Grover Beach   | Grover Beach     | 1       | HVAC Split Systems | \$ 4,544      |
|                          | ECM-21A.15 | Modular Bldg in Grover Beach | Grover Beach     | 3       | HVAC Systems       | \$ 34,080     |
|                          | ECM-21A.16 | Drug and Alcohol Services    | Grover Beach     | 4       | HVAC Split Systems | \$ 18,176     |
|                          | Subtotal   |                              |                  |         |                    | \$ 181,760    |
| Priority #3              | ECM-21A.17 | County Operations Center     | Comm. Shop       | 1       | HVAC Split Systems | \$ 4,544      |
|                          | ECM-21A.18 | County Operations Center     | Detectives Bldg  | 5       | HVAC Split Systems | \$ 22,720     |
|                          | ECM-21A.19 | County Operations Center     | Main Female Jail | 11      | HVAC Systems       | \$ 124,960    |
|                          | ECM-21A.20 | County Operations Center     | Main Female Jail | 1       | DX FCU             | \$ 4,544      |
|                          | ECM-21A.21 | County Operations Center     | Main Female Jail | 1       | Boiler             | \$ 6,816      |
|                          | ECM-21A.22 | County Operations Center     | Main Female Jail | 1       | Pumps              | \$ 1,988      |
|                          | ECM-21A.23 | County Operations Center     | Main Female Jail | 2       | Unit Heater        | \$ 11,928     |
|                          | ECM-21A.24 | County Operations Center     | Juvenile Hall    | 3       | HVAC Split Systems | \$ 13,632     |
|                          | ECM-21A.25 | County Operations Center     | Juvenile Hall    | 1       | HVAC Systems       | \$ 11,360     |
|                          | ECM-21A.26 | County Operations Center     | Juvenile Hall    | 3       | DX FCU             | \$ 13,632     |
|                          | ECM-21A.27 | County Operations Center     | Juvenile Hall    | 1       | Unit Heater        | \$ 5,964      |
|                          | ECM-21A.28 | County Operations Center     | Animal Services  | 1       | HVAC Systems       | \$ 11,360     |
|                          | Subtotal   |                              |                  |         |                    | \$ 233,448    |
| Priority #4              | ECM-21A.29 | General Services             | San Luis Obispo  | 5       | HVAC Systems       | \$ 56,800     |
|                          | ECM-21A.30 | Kimball Bldg                 | San Luis Obispo  | 6       | HVAC Systems       | \$ 68,160     |
|                          | ECM-21A.31 | Grand Jury                   | San Luis Obispo  | 1       | HVAC Split Systems | \$ 4,544      |
|                          | ECM-21A.32 | Ag Comm. / Health Agency     | San Luis Obispo  | 12      | HVAC Systems       | \$ 136,320    |
|                          | Subtotal   |                              |                  |         |                    | \$ 265,824    |
| Total                    |            |                              |                  |         |                    | \$ 990,024    |

| EMCS - Upgrades |           |                   |                 | # Units | Eqpt Type  | Total Cost \$       |
|-----------------|-----------|-------------------|-----------------|---------|------------|---------------------|
| Priority        | ECM#      | Building          | City            |         |            |                     |
| Priority #5     | ECM-21B.1 | Old Courthouse    | San Luis Obispo | 89      | ChW/HW FCU | \$ 386,723          |
|                 | ECM-21B.2 | Annex             | San Luis Obispo | 18      | ChW/HW FCU | \$ 78,214           |
|                 | ECM-21B.3 | Government Center | San Luis Obispo | 4       | VAV AHU    | \$ 52,142           |
|                 | ECM-21B.4 | Government Center | San Luis Obispo | 14      | VAV Boxes  | \$ 53,229           |
|                 | ECM-21B.5 | Government Center | San Luis Obispo | 3       | ChW/HW FCU | \$ 13,036           |
|                 | ECM-21B.6 | Government Center | San Luis Obispo | 245     | Lighting   | \$ 559,606          |
| <b>Total</b>    |           |                   |                 |         |            | <b>\$ 1,142,949</b> |